

**Notice of Allowability**

Application No.

10/624,681

Examiner

Courtney D. Fields

Applicant(s)

INOMATA ET AL.

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11 October 2007.
2. ☒ The allowed claim(s) is/are 1-15.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Stephen Catlin on 20 December 2007.

The application has been amended as follows:

Please amend the following paragraph within the specification:

Each of the compression/encryption devices and  
decompression/decryption devices described above can be realized as software, which  
can be stored in a computer readable storage medium such as a memory, and it is also  
possible to have some or all of the sections as hardware circuits.

### **DETAILED ACTION**

2. Claims 5-8 have been amended.
3. Claims 1-15 are pending.

### ***Response to Arguments***

4. Applicant's arguments filed 11 October 2007 have been fully considered and they are persuasive.

### ***Allowable Subject Matter***

5. **Claims 1-15 are allowed.**

6. The following is an examiner's statement of reasons for allowance: The present invention is directed towards a device for compressing and encrypting data in which a compressor compresses original data with reference to a reference table, an encryptor encrypts the reference table or information necessary to reconstruct the reference table and a multiplexor multiplexes the compressed data and the encrypted data obtained from the encryptor to create multiplexed data that is output. Claims 1,12, and 14 identifies the uniquely distinct features **"compressing original data with reference to a reference table, encrypting the reference table itself or information necessary to reconstruct the reference table, and multiplexing compressed data obtained from the compressor and encrypted data obtained from the encryptor to create multiplexed data, wherein the multiplexed data is output as an encryption result"**. Claims 8,13, and 15 identifies the uniquely distinct features **"extracting compressed data which is a compressed result obtained by compressing the original data, and encrypted data which is an encrypted result obtained by encrypting a reference table to be referenced when performing data compression of the compressed data, from multiplexed data, decoding the encrypted data, and decompress the compressed data wherein decompressed data from the decompressor is output as a decoded result"**.

The closest prior art, Barbir (US Patent No. 6,122,379) discloses a method and apparatus for performing simultaneous data compression and encryption both compresses and encrypts data in a single step. The invention includes a novel modeling method for use in conjunction with a coder, such as an arithmetic coder. The modeling

method introduces randomness into the compression process, with the result that the output stream is secure.

However, either singularly or in combination, Barbir fail to anticipate or render the claimed limitations of the reference table or information necessary to reconstruct the reference table is encrypted, multiplexing of compressed data and encrypted reference table information, or a demultiplexor for extracting compressed data which is a compressed result obtained by compressing the original data, and encrypted data which is an encrypted result obtained by encrypting a reference table to be referenced when performing data compression of the compressed data.

The closest prior art, Bledsoe (US Patent No. 4,700,175) discloses a method and apparatus for compression of data includes first encoding data characters according to a relative frequency of use table for each character to produce a frequency code. This frequency code is then compressed using a modified Huffman code. The code is modified by restricting the maximum word length to a predetermined number of bits. Different types of text can be encoded according to different frequency of use tables to maximize compression efficiency for various types of source data with minimum data processing.

However, either singularly or in combination, Bledsoe fail to anticipate or render the claimed limitations of encrypting the reference table itself or information necessary to create the reference table or to multiplex the encrypted reference table information with the compressed original data.

7. Therefore, **claims 1,8,12-15**, and the respective **dependent claims 2-7 and 9-11** are in condition for allowance.

***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney D. Fields whose telephone number is 571-272-3871. The examiner can normally be reached on Mon - Thurs. 6:00 - 4:00 pm; off every Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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cdf

December 20, 2007

  
**MATTHEW SMITHERS**  
**PRIMARY EXAMINER**  
*Art Unit 2137*